

2018 Near Term Actions

Four-year Prioritization & 2019/2021 Funding
Decision





Criteria

- **Actions we can measure on the ground:** Capital projects that have a high contribution (i.e. significant contribution to an established recovery target) to recovery.
- **Programmatic Support:** Non-capital projects (or elements of projects) that have fewer dedicated funding sources: Examples include science, monitoring, education, and behavior change.
- **Scalability:** Easily scaled to direct award allocation. Timing of project implementation (i.e. single-phase efforts that can be quickly implemented/mobilized within two years).

Snohomish + Combined Basin 2018

Local NTAs

| NTA ID | Title | Type of Action | Tier | Cost | Activity Type |
|-----------|--|-------------------|------|--------------|---------------|
| 2018-0635 | Tulalip Shoreline Landowner Outreach and Education Campaign | Non site-specific | 4 | \$200,000 | 2.2 |
| 2018-0123 | Using Beaver to Restore Ecosystem Function in the Snohomish Watershed | Site specific | 4 | \$193,536 | 1.1 |
| 2018-0749 | Incorporating Climate Change into the Design of Culverts Prioritized for Replacement to Improve Fish Passage in King County | Non site-specific | 4 | \$110,000 | 1.1 |
| 2018-0271 | Tolt River Mouth & Lower Frew Floodplain Reconnection Design/Construction | Site specific | 4 | \$17,000,000 | 1.1 |
| 2018-0296 | Barfuse/Hafner Floodplain Reconnection Design and Construction | Site specific | 4 | \$12,000,000 | 1.1 |
| 2018-0338 | Snohomish Basin Floodplain Acquisition Strategy | Site specific | 4 | \$3,000,000 | 3.1 |
| 2018-0970 | Forest Management for Water and Climate Preparedness: assessing alternative forest actions individually and in aggregate for estimates of effectiveness in improving surface and groundwater management for salmon using future scenarios. | Non site-specific | 4 | \$302,000 | 3.4 |
| 2018-0397 | Pilchuck River Dam and Armoring Removal Restoration Project | Site specific | 4 | \$2,522,000 | 1.1 |
| 2018-0400 | Coho Creek Relocation and Enhancement Project | Site specific | 4 | \$208,538 | 1.1 |
| 2018-0541 | Spencer Island Estuary Restoration | Site specific | 4 | \$6,500,000 | 1.1 |
| 2018-0584 | Snohomish River Estuary Derelict Vessel Removal | Site specific | 4 | \$450,000 | 1.1 |
| 2018-0968 | Strategic outreach to encourage owners of priority King County Land Conservation Initiative properties to enroll in PBRs/CUT | Site specific | 4 | \$500,000 | 2.2 |
| 2018-0971 | Farm and forest plan implementation and barriers to adopting best management practices. | Site specific | 4 | \$375,000 | 2.2 |
| 2018-0589 | Snohomish River Estuary Creosote Piling Removal Planning, Prioritization, and Removal | Site specific | 4 | \$100,000 | 1.1 |
| 2018-0792 | Source Identification of Toxics Impacting Juvenile Chinook Salmon in Two Major Puget Sound Rivers | Site specific | 4 | \$550,000 | 3.5 |
| 2018-0799 | Snohomish Confluence Project | Site specific | 4 | \$617,000 | 1.1 |

| Activity Type Key |
|---|
| 1.1 Ecosystem Management & Restoration |
| 1.2 Species Management & Recovery |
| 2.1 Behavior Change - Awareness Raising (Education) |
| 2.2 Behavior Change - Livelihood, Economic & Other Incentives |
| 2.3 Behavior Change - Law Enforcement & Compliance |
| 3.1 Ecosystem Protection |
| 3.2 Recovery Design and Planning |
| 3.3 Law, Policy, Regulations |
| 3.4 Research |
| 3.5 Monitoring & Evaluation |
| 3.6 Formal Education & Technical Capacity Building |
| 3.7 Institutional Infrastructure & Development |

| NTA ID | Title | Type of Action | Tier | Cost | Activity Type |
|-----------|--|-------------------|------|-----------|---------------|
| 2018-0097 | Sustainable Lands Strategy Communication and Outreach | Non site-specific | 3 | \$175,000 | 2.2 |
| 2018-0841 | Working buffers for water quality, wildlife habitat, and agricultural resilience on agricultural lands | Site specific | 4 | \$165,000 | 1.1 |
| 2018-0304 | Comprehensive Fish Passage Assessment of 4 high priority subbasins | Non site-specific | 3 | \$200,000 | 3.2 |
| 2018-0330 | Catchment Wide Ditch Maintenance Retrofit Project | Non site-specific | 3 | \$250,000 | 3.4 |
| 2018-0399 | Integrated Hydraulic and Hydrologic Modeling in the Snohomish River and Stillaguamish River Watersheds | Non site-specific | 3 | \$713,000 | 3.4 |
| 2018-0129 | Financing Options for Healthy Onsite Sewage Systems (OSS) | Non site-specific | 3 | \$675,000 | 2.2 |
| 2018-0872 | Snohomish County Farmland Protection Initiative | Site specific | 4 | \$468,000 | 3.1 |
| 2018-0256 | Surface Water Incentive Program | Non site-specific | 3 | \$655,758 | 2.2 |
| 2018-0454 | Latino Stormwater Pollution Awareness and Behavior Change Campaign - Phase 2 | Non site-specific | 3 | \$604,800 | 2.1 |
| 2018-0509 | Measurement of Pharmaceuticals, Personal Care Products, and Perfluoroalkyl Substances in Budd Inlet and Port Gardner Bay sediments | Non site-specific | 3 | \$104,018 | 3.5 |
| 2018-0499 | Stormwater System Maintenance Outreach Effort | Non site-specific | 3 | \$150,000 | 2.1 |
| 2018-0134 | Enhancing Lowland Anadromous Streams Using Beaver Dam Analogs (BDAs) | Site specific | 3 | \$45,234 | 1.1 |
| 2018-0162 | Upper Snoqualmie River Riparian Restoration and Stewardship | Site specific | 3 | \$330,000 | 1.1 |
| 2018-0531 | Infill - Land use planning to direct growth into the UGA | Non site-specific | 3 | \$340,000 | 3.2 |
| 2018-0551 | Water Supply and Growth in the Rural/Resource Areas | Non site-specific | 3 | \$400,000 | 3.2 |
| 2018-0599 | Farm Plans and CAO Regulatory Flexibility Assessment | Non site-specific | 3 | \$150,000 | 2.3 |
| 2018-0601 | Social Marketing to Improve Forest Health through Private Property Stewardship | Non site-specific | 3 | \$235,260 | 2.1 |
| 2018-0613 | Developing tools for multi-benefit project selection and sequencing in the Snohomish River Basin | Non site-specific | 3 | \$600,000 | 3.7 |
| 2018-0618 | Stormwater Assessment, Outreach, and Assistance to Jurisdictions in the Snohomish Basin (WRIA 7) | Non site-specific | 3 | \$164,500 | 3.6 |
| 2018-0248 | Skykomish River Riparian Restoration and Stewardship | Site specific | 3 | \$240,000 | 1.1 |

| Activity Type Key |
|---|
| 1.1 Ecosystem Management & Restoration |
| 1.2 Species Management & Recovery |
| 2.1 Behavior Change - Awareness Raising (Education) |
| 2.2 Behavior Change - Livelihood, Economic & Other Incentives |
| 2.3 Behavior Change - Law Enforcement & Compliance |
| 3.1 Ecosystem Protection |
| 3.2 Recovery Design and Planning |
| 3.3 Law, Policy, Regulations |
| 3.4 Research |
| 3.5 Monitoring & Evaluation |
| 3.6 Formal Education & Technical Capacity Building |
| 3.7 Institutional Infrastructure & Development |

| NTA ID | Title | Type of Action | Tier | Cost | Activity Type |
|-----------|--|-------------------|------|-------------|---------------|
| 2018-0623 | Geomorphic Flood Hazard Risk on the Lower Skykomish River | Non site-specific | 3 | \$210,000 | 3.2 |
| 2018-0280 | Stream-type Yearling Chinook Study in the Snoqualmie River | Site specific | 3 | \$90,000 | 3.4 |
| 2018-0667 | Shoreline armoring monitoring and characterization of chinook salmon rearing capacity in edge habitats of Snohomish-Stilly LIO rivers using regional approaches. | Non site-specific | 3 | \$200,000 | 3.5 |
| 2018-0690 | Enhance Code Enforcement Effectiveness on the Tulalip Reservation | Non site-specific | 3 | \$100,000 | 2.3 |
| 2018-0396 | Tolt River Upper Frew Floodplain Reconnection Feasibility/Design | Site specific | 3 | \$3,400,000 | 1.1 |
| 2018-0715 | Integrating climate resilience into farm-fish-flood project packages in the Snohomish and Stillaguamish River floodplains | Non site-specific | 3 | \$600,000 | 3.2 |
| 2018-0535 | Making Space For Water Initiative: Water storage projects to restore salmon habitat, improve hydrology, and build climate resilience in the Stillaguamish and Snohomish River watersheds | Site specific | 3 | \$200,000 | 3.2 |
| 2018-0810 | Stream and Lakeside Landowner Education and Assistance Program | Non site-specific | 3 | \$590,903 | 2.1 |
| 2018-0557 | Ebey Island Land Management and Land Use Coordination Plan | Site specific | 3 | \$75,000 | 1.1 |
| 2018-0693 | Big Buffers on Pilchuck River and French Creek | Site specific | 3 | \$500,000 | 1.1 |
| 2018-0716 | Snohomish County Enhanced Conservation Reserve Enhancement Program Pilot Project | Site specific | 3 | \$100,000 | 2.2 |
| 2018-0837 | Implementing a Strategic Watershed based Stormwater Facilities Retrofit Plan and Projects | Non site-specific | 3 | \$750,000 | 3.7 |
| 2018-0769 | Commercial Property Engagement through Parking Lot Retrofits in Bear/Little Bear Watersheds | Site specific | 3 | \$329,500 | 1.1 |
| 2018-0873 | Monitoring effectiveness of multi-benefit floodplain project implementation in Snohomish and Stillaguamish Rivers | Non site-specific | 3 | \$300,000 | 3.5 |
| 2018-0836 | Enhancing soil health in a changing climate for hydrologic, habitat, and agricultural benefits | Site specific | 3 | \$140,000 | 1.1 |

| Activity Type Key |
|---|
| 1.1 Ecosystem Management & Restoration |
| 1.2 Species Management & Recovery |
| 2.1 Behavior Change - Awareness Raising (Education) |
| 2.2 Behavior Change - Livelihood, Economic & Other Incentives |
| 2.3 Behavior Change - Law Enforcement & Compliance |
| 3.1 Ecosystem Protection |
| 3.2 Recovery Design and Planning |
| 3.3 Law, Policy, Regulations |
| 3.4 Research |
| 3.5 Monitoring & Evaluation |
| 3.6 Formal Education & Technical Capacity Building |
| 3.7 Institutional Infrastructure & Development |

| NTA ID | Title | Type of Action | Tier | Cost | Activity Type |
|-----------|---|-------------------|------|-------------|---------------|
| 2018-0843 | Sound Horsekeeping - controlling mud and manure on horse properties in the Snohomish and Stillaguamish River watersheds and Camano Island | Site specific | 3 | \$270,000 | 1.1 |
| 2018-0972 | Implementation of the top recommendations generated by the Snoqualmie Valley Fish Farm Flood advisory committee | Site specific | 3 | \$5,000,000 | 1.1 |
| 2018-0888 | Capacity Building for Strategic Project Funding in the Snohomish-Stillaguamish LIO | Non site-specific | 3 | \$200,000 | 3.7 |
| 2018-0926 | Sustaining School Green Stormwater Infrastructure | Non site-specific | 3 | \$199,300 | 3.7 |
| 2018-0976 | Suspended sediment-bound toxic chemical fluxes from the Snohomish and/or Stillaguamish River to Puget Sound. | Site specific | 3 | \$600,000 | 3.5 |
| 2018-0964 | Regulatory Harmonization for Salmon Habitat Protection and Restoration - Phase I: Methods and Tools | Non site-specific | 3 | \$394,085 | 3.6 |
| 2018-0966 | Regulatory Harmonization for Salmon Habitat Protection and Restoration - Phase 2: Application of methods and tools developed in Phase I for regulatory permit support and policy action guidance for two pilot study areas in the Snohomish Basin | Non site-specific | 3 | \$258,380 | 3.6 |
| 2018-0555 | New Ruralism | Non site-specific | 2 | \$310,000 | 3.2 |
| 2018-0617 | Watershed Engagement for Decision Makers WRIAs 5 & 7 | Non site-specific | 2 | \$33,000 | 2.1 |
| 2018-0922 | Ranges of Woody Debris Frequency and Volume for Stream Habitat Restoration in King County and Other Puget Sound Lowland Areas. | Non site-specific | 2 | \$87,250 | 3.4 |
| 2018-0269 | Snoqualmie River Temperature Study | Site specific | 2 | \$300,000 | 3.5 |
| 2018-0967 | Urban Tree and Forest Canopy Cover Toolkit (Phase II) | Non site-specific | 2 | \$150,000 | 3.6 |
| 2018-0627 | Lower French Creek Fish Passage Improvements | Site specific | 2 | \$1,200,000 | 1.1 |
| 2018-0650 | Measuring Habitat Project Effectiveness | Site specific | 2 | \$86,000 | 3.5 |
| 2018-0904 | Water Typing / eDNA Assessments | Site specific | 2 | \$400,000 | 1.1 |

| Activity Type Key |
|---|
| 1.1 Ecosystem Management & Restoration |
| 1.2 Species Management & Recovery |
| 2.1 Behavior Change - Awareness Raising (Education) |
| 2.2 Behavior Change - Livelihood, Economic & Other Incentives |
| 2.3 Behavior Change - Law Enforcement & Compliance |
| 3.1 Ecosystem Protection |
| 3.2 Recovery Design and Planning |
| 3.3 Law, Policy, Regulations |
| 3.4 Research |
| 3.5 Monitoring & Evaluation |
| 3.6 Formal Education & Technical Capacity Building |
| 3.7 Institutional Infrastructure & Development |

Alternatives

Programmatic Support Scenario

| NTA ID | Title | Owner | Type of Action | Cost | Tier | Notes | Activity Type |
|-----------|--|------------------|-------------------|-----------|------|------------------------------|---------------|
| 2018-0635 | Tulalip Shoreline Landowner Outreach and Education Campaign* | Tulalip Tribes | Non site-specific | \$200,000 | 4 | | 2.2 |
| 2018-0749 | Incorporating Climate Change into the Design of Culverts Prioritized for Replacement to Improve Fish Passage in King County | King County | Non site-specific | \$110,000 | 4 | | 1.1 |
| 2018-0970 | Forest Management for Water and Climate Preparedness: assessing alternative forest actions individually and in aggregate for estimates of effectiveness in improving surface and groundwater management for salmon using future scenarios. | Tulalip Tribes | Non site-specific | \$302,000 | 4 | | 3.4 |
| 2018-0097 | Sustainable Lands Strategy Communication and Outreach* | WDFW | Non site-specific | \$175,000 | 3 | Partially included in FbD? | 2.2 |
| 2018-0129 | Financing Options for Healthy Onsite Sewage Systems (OSS)* | Snohomish County | Non site-specific | \$675,000 | 3 | | 2.2 |
| 2018-0256 | Surface Water Incentive Program* | Snohomish County | Non site-specific | \$655,758 | 3 | | 2.2 |
| 2018-0304 | Comprehensive Fish Passage Assessment of 4 high priority subbasins | King County | Non site-specific | \$200,000 | 3 | | 3.2 |
| 2018-0330 | Catchment Wide Ditch Maintenance Retrofit Project | King County | Non site-specific | \$250,000 | 3 | | 3.4 |
| 2018-0399 | Integrated Hydraulic and Hydrologic Modeling in the Snohomish River and Stillaguamish River Watersheds | Snohomish County | Non site-specific | \$713,000 | 3 | Funded in FbD | 3.4 |
| 2018-0454 | Latino Stormwater Pollution Awareness and Behavior Change Campaign - Phase 2* | WSU Extension | Non site-specific | \$604,800 | 3 | Previously LIO Direct Funded | 2.1 |

*Note that these NTAs also appear on the Behavior Change list

Measurable On-the-Ground Scenario

| NTA ID | Title | Owner | Type of Action | Cost | Tier | Notes | Activity Type |
|-----------|---|---------------------|----------------|--------------|------|--|---------------|
| 2018-0123 | Using Beaver to Restore Ecosystem Function in the Snohomish Watershed | Tulalip Tribes | Site specific | \$193,536 | 4 | Top 10 Stilly Priority List | 1.1 |
| 2018-0271 | Tolt River Mouth & Lower Frew Floodplain Reconnection Design/Construction | King County | Site specific | \$17,000,000 | 4 | 2016 SRFB/PSAR Funding | 1.1 |
| 2018-0296 | Barfuse/Hafner Floodplain Reconnection Design and Construction | King County | Site specific | \$12,000,000 | 4 | 2018 SRFB/PSAR Funding | 1.1 |
| 2018-0338 | Snohomish Basin Floodplain Acquisition Strategy | Tulalip Tribes | Site specific | \$3,000,000 | 4 | SRFB & Stilly IC Direct Funding (fully?) | 3.1 |
| 2018-0397 | Pilchuck River Dam and Armoring Removal Restoration Project | Tulalip Tribes | Site specific | \$2,522,000 | 4 | 2017 & 2018 PSAR/SRFB Funding | 1.1 |
| 2018-0400 | Coho Creek Relocation and Enhancement Project | Tulalip Tribes | Site specific | \$208,538 | 4 | | 1.1 |
| 2018-0541 | Spencer Island Estuary Restoration | WDFW | Site specific | \$6,500,000 | 4 | | 1.1 |
| 2018-0584 | Snohomish River Estuary Derelict Vessel Removal | Snohomish MRC | Site specific | \$450,000 | 4 | Ongoing program previously LIO Direct Funded | 1.1 |
| 2018-0589 | Snohomish River Estuary Creosote Piling Removal Planning, Prioritization, and Removal | Snohomish MRC | Site specific | \$100,000 | 4 | | 1.1 |
| 2018-0792 | Source Identification of Toxics Impacting Juvenile Chinook Salmon in Two Major Puget Sound Rivers | WA Dept. of Ecology | Site specific | \$550,000 | 4 | 2018 Stormwater SIAT Fully Funded | 3.5 |

Behavior Change Scenario

| NTA ID | Title | Owner | Type of Action | Cost | Tier | Notes | Activity Type |
|-----------|--|------------------|-------------------|-----------|------|------------------------------|---------------|
| 2018-0635 | Tulalip Shoreline Landowner Outreach and Education Campaign* | Tulalip Tribes | Non site-specific | \$200,000 | 4 | | 2.2 |
| 2018-0968 | Strategic outreach to encourage owners of priority King County Land Conservation Initiative properties to enroll in PBRs/CUT | King County | Site specific | \$500,000 | 4 | | 2.2 |
| 2018-0971 | Farm and forest plan implementation and barriers to adopting best management practices. | King County | Site specific | \$375,000 | 4 | | 2.2 |
| 2018-0097 | Sustainable Lands Strategy Communication and Outreach* | WDFW | Non site-specific | \$175,000 | 3 | Partially included in FbD? | 2.2 |
| 2018-0129 | Financing Options for Healthy Onsite Sewage Systems (OSS)* | Snohomish County | Non site-specific | \$675,000 | 3 | | 2.2 |
| 2018-0256 | Surface Water Incentive Program* | Snohomish County | Non site-specific | \$655,758 | 3 | | 2.2 |
| 2018-0454 | Latino Stormwater Pollution Awareness and Behavior Change Campaign - Phase 2* | WSU Extension | Non site-specific | \$604,800 | 3 | Previously LIO Direct Funded | 2.1 |
| 2018-0499 | Stormwater System Maintenance Outreach Effort | Snohomish County | Non site-specific | \$150,000 | 3 | | 2.1 |
| 2018-0599 | Farm Plans and CAO Regulatory Flexibility Assessment | King County | Non site-specific | \$150,000 | 3 | | 2.3 |
| 2018-0601 | Social Marketing to Improve Forest Health through Private Property Stewardship | King County | Non site-specific | \$235,260 | 3 | | 2.1 |

*Note that these NTAs also appear on the Programmatic list

Proposed follow-up with NTA owners

- Can your project be scaled to the \$100,000 award? If so, please explain.
- Are you ready to proceed upon award/can you implement the effort within the 18 months?

